Name _____

STUDY GUIDE: PLANTS

Note: Also study your labeled diagrams of the different plant structures (flower and leaf).

Facts about Fertilizers

1. Why do plants need nitrogen?

2. Why do plants need phosphorus?

3. Why do plants need potassium?

4. List 4 micronutrients.

5. Why is it bad for plants to have too much fertilizer?

Tropisms

6. The way a plant grows or bends in response to touch is called _____
and the way a plant grows or bends in response to water is called _____.

7. The way a plant grows or bends in response to gravity is called _____,
and the way a plant grows or bends in response to light is called _____.

8. A positive stimulus is when a plant moves _____ the stimulus.

Life Cycle of Plants ***(Note: Also know the order of the life cycle!)***

9. The inactive stage of the seed is called the _____ stage.

10. The _____ allows seeds to withstand extreme temperatures, and the important food-storing tissue that nourishes the developing embryo is the _____.

11. Seed leaves are called _____.

12. An example of a dicot would be _____ because it contains _____ cotyledons.
(#)

13. The process by which a seed becomes a plant is called _____.

Structure of Flowering Plants

14. The structure that supports the anther is the _____.

15. The structure that supports the stigma is the _____.

16. The male reproductive parts of a flower (including the anther and filament) are collectively called the _____ and the female reproductive parts (including the stigma, style, and ovary) are collectively called the _____.

17. The _____ produces ovules, which contain egg nuclei.

18. The _____ produces pollen, which contains sperm nuclei.

Reproduction of Flowering Plants

19. A _____ flower has both male and female reproductive parts.

20. The union of a sperm with an egg is called _____.

21. The transfer of pollen from an anther to a stigma is called _____. If this occurs on the same plant, it is known as _____. If it is on another plant of the same species, it is called _____.

22. Why are some flowers colorful and scented? _____

23. Name 3 things that aid in pollination. _____, _____, & _____

Leaves

24. The "skin" or waxy film that covers the upper epidermis and protects the leaf from losing too much water is the _____.

25. The layer of cells between the upper and lower epidermis that contains palisade cells and a spongy layer is the _____.

26. The tiny openings throughout the lower epidermis of a leaf that aid in gas exchange are called _____.

27. When _____ fill with water, they swell and develop an opening.

28. What part of a leaf carries water and other substances? _____

Overview

29. Seeds need _____but NOT _____ to germinate, and plants need both _____ AND _____ to grow.

30. What is the function of each of the following plant parts?

- Roots
- Flowers
- Leaves